

**What is claimed is:**

1. A low frequency attenuation circuit which is used in an FM/AM radio receiver, comprising:
  - 5 a first switch for selecting an FM detected signal or an AM detected signal;
  - a capacitor provided on the output side of said first switch;
  - a plurality of resistors provided on the output
  - 10 side of said first switch; and
  - a second switch constituting a high-pass filter for the AM detected signal using a resistor selected from said plurality of resistors and said capacitor when said first switch selects the AM detected signal.
- 15 2. The low frequency attenuation circuit according to claim 1, wherein
  - said first switch, said plurality of resistors and said second switch are formed in an integrated circuit.
- 20 3. The low frequency attenuation circuit according to claim 1 or 2, further comprising
  - a high frequency attenuation circuit for attenuating high frequency component of a detected
  - 25 signal, wherein

said second switch selects a resistor from said plurality of resistors based on the operation of said high frequency attenuation circuit.

- 5    4.    A low frequency attenuation circuit which is used in an FM/AM radio receiver, comprising:

        a first switch for selecting an FM detected signal or an AM detected signal;

        a capacitor provided on the output side of said  
10    first switch;

        resistor means provided on the output side of said first switch;

        a control circuit for controlling the resistance of said resistor means;

15          a second switch for constituting a high-pass filter for the AM detected signal using said resistor means and said capacitor when said first switch selects the AM detected signal, wherein

        said control circuit controls the resistance of  
20    said resistor means so that the cut-off frequency of the high-pass filter is a prescribed frequency which is determined based on the hearing sense of voice reproduced from the AM detected signal.

- 25    5.    An FM/AM radio receiver, comprising:

an FM detection circuit for generating an FM detected signal from a received wave;

an AM detection circuit for generating an AM detected signal from the received wave;

5        a first switch for selecting the FM detected signal or the AM detected signal;

a capacitor provided on the output side of said first switch;

a plurality of resistors provided on the output  
10 side of said first switch; and

a second switch for constituting a high-pass filter for the AM detected signal using a resistor selected from said plurality of resistors and said capacitor when said first switch selects the AM detected  
15 signal.

6.     A low frequency attenuation circuit which is used in an FM/AM radio receiver, comprising:

a first switch for selecting an FM detected signal  
20 or an AM detected signal;

a capacitor provided on the output side of said first switch;

a plurality of resistors provided on the output side of said first switch; and

25        a second switch constituting a high-pass filter

for the AM detected signal using a resistor selected from said plurality of resistors and the capacitor when said first switch selects the AM detected signal, and constituting a high-pass filter for the FM detected  
5 signal using a resistor selected from said plurality of resistors and said capacitor when said first switch selects the FM detected signal.

7. The low frequency attenuation circuit according  
10 to claim 6, further comprising

a high frequency attenuation circuit for attenuating high frequency component of a detected signal, wherein

said second switch selects a resistor from said  
15 plurality of resistors based on the operation of said high frequency attenuation circuit.